THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A homogeneous liquid adjuvant for use with a chemical used in agriculture comprising:

   (a) not in excess of about 75% by weight of one or more lipophilic solvents;

   (b) not in excess of about 50% by weight of one or more lipophobic plant nutrients; and

   (c) not in excess of about 50% of a mixture of one or more cationic emulsifiers selected from the group consisting of cationic emulsifiers, emulsifiers having cationic characteristics in acidic conditions and mixtures thereof;

   wherein the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition.

2. An adjuvant according to claim 1 comprising:

   (a) from 5 to 55 % by weight of one or more lipophilic solvents;

   (b) from 1 to 30 % by weight of one or more lipophobic plant nutrients; and

   (c) from 1 to 15% of a mixture of one or more cationic emulsifiers.

3. An adjuvant according to claim 2 comprising:

   (a) from 15 to 35% by weight of one or more lipophilic solvents;

   (b) from 5 to 25% by weight of one or more lipophobic plant nutrients; and

   (c) from 1 to 10% of a mixture of one or more cationic emulsifiers.

4. An adjuvant according to claim 1 wherein the lipophilic solvent is selected from the group consisting of petroleum fractions, vegetable oils, synthetic triglycerides, alkyl esters of fatty acids, fatty alcohols, guerbet alcohols or any mixture thereof.

5. An adjuvant according to claim 4 wherein the lipophilic solvent comprises a petroleum fraction.

6. An adjuvant according to claim 5 wherein the petroleum fraction is a mineral oil.

7. An adjuvant according to claim 4 wherein the lipophilic solvent comprises an alkyl ester of a fatty acid.

8. An adjuvant according to claim 7 wherein the fatty acid of the alkyl ester of a fatty acid has an alkyl moiety derived from the simple alcohols methanol, ethanol, propanol or butanol.

9. An adjuvant according to claim 7 wherein the alkyl ester of a fatty acid is derived from natural oils and fats, specific blends produced by fatty acid manufacturers or from fatty acids produced by synthetic means.

10. An adjuvant according to claim 9 wherein the natural oils and fats are selected from the group consisting of lard, tallow, vegetable oils and mixtures thereof.

11. An adjuvant according to claim 1 wherein the lipophobic plant nutrients comprise one or more ammonium salts of inorganic ions.

12. An adjuvant according to claim 11 wherein the ammonium salts of inorganic ions are selected from the group consisting of ammonium sulfate, ammonium phosphate and mixtures thereof.

13. An adjuvant according to claim 12 wherein the ammonium salt of inorganic ions is ammonium sulfate.

14. An adjuvant according to claim 1 wherein the cationic emulsifiers are selected from fatty amines, fatty amine oxides or mixtures thereof.

15. An adjuvant according to claim 1 wherein the cationic emulsifiers are quaternary cationic emulsifiers.

16. An adjuvant according to claim 1 wherein the cationic emulsifiers are selected from dimethylcocoamine, dimethyllaurylamine oxide, alkyltrimethylammonium chloride, alkyl dimethylbenzylammonium chloride, alkylpyridium chloride, alkylimidazolium chloride, or mixtures thereof.

17. An adjuvant according to claim 16 wherein the cationic emulsifiers are selected alkyltrimethylammonium chloride, dimethyllaurylamine oxide or mixtures thereof.

18. An adjuvant according to any of the preceding claims further comprising one or more other components to improve the form of the composition.

19. An adjuvant according to claim 18 wherein the other component is selected from nonionic emulsifiers, co-solvents and mixtures thereof.

20. An adjuvant according to claim 18 wherein the other component is a mixture of one or more nonionic emulsifiers.

21. An adjuvant according to claim 19 wherein the nonionic emulsifiers are selected from the group consisting of alkyl polysaccharides, sorbate emulsifiers, alcohol ethoxylates, fatty alkanolamides or mixtures thereof.

22. An adjuvant according to claim 18 wherein the other component is a co-solvent.

23. An adjuvant according to claim 22 wherein the co-solvent is selected from the group consisting of propylene glycol, 1,3-butanediol, hexylene glycol, polypropylene glycols, ethanol or mixtures thereof.

24. An adjuvant according to claim 6 wherein the cationic emulsifiers are quaternary cationic emulsifiers.

25. An adjuvant according to claim 24 further comprising nonionic emulsifiers selected from the group consisting of alkylpolysaccharides, fatty alkanolamide, sorbitan monooleate, alcohol ethoxylate and mixtures thereof.

26. An adjuvant according to claim 24 further comprising co-solvents selected from the group consisting of 1,3-butanediol, ethanol and mixtures thereof.

27. An adjuvant according to claim 7 wherein at least two cationic emulsifiers are used.

28. An adjuvant according to claim 27 wherein the mixture of cationic emulsifiers comprises fatty quaternary ammonium chlorides and/or fatty amine oxides in conjunction with fatty alkyldimethylamine salts of simple organic acids.

29. An adjuvant according to any of the preceding claims further comprising one or more other available adjuvant components.

30. An agrochemical composition comprising a chemical used in agriculture and an activity enhancing amount of a homogeneous liquid adjuvant, said homogeneous liquid adjuvant comprising:

(a) not in excess of about 75% by weight of one or more lipophilic solvents;

(b) not in excess of about 50% by weight of one or more lipophobic plant nutrients; and

(c) not in excess of about 50% of a mixture of one or more cationic emulsifiers selected from the group consisting of cationic emulsifiers, emulsifiers which exhibit cationic characteristics in acidic conditions and mixtures thereof;

wherein the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition.

31. A homogeneous liquid adjuvant when used with a chemical used in agriculture comprising:

(a) not in excess of about 75% by weight of one or more lipophilic solvents;

(b) not in excess of about 50% by weight of one or more lipophobic plant nutrients; and

(c) not in excess of about 50% of a mixture of one or more cationic emulsifiers selected from the group consisting of cationic emulsifiers, emulsifiers which exhibit cationic characteristics in acidic conditions or mixtures thereof;

wherein the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition.

32. A method for enhancing the activity of a chemical used in agriculture comprising the step of combining the chemical with a homogeneous liquid adjuvant comprising:

(a) not in excess of about 75% by weight of one or more lipophilic solvents;

(b) not in excess of about 50% by weight of one or more lipophobic plant nutrients; and

(c) not in excess of about 50% of a mixture of one or more cationic emulsifiers selected from the group consisting of cationic emulsifiers, emulsifiers which exhibit cationic characteristics in acidic conditions and mixtures thereof;

wherein the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition.

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33. A method of treating vegetation comprising the step of applying an agrochemical composition comprising a chemical used in agriculture and a homogeneous liquid adjuvant comprising:

(a) not in excess of about 75% by weight of one or more lipophilic solvents;

(b) not in excess of about 50% by weight of one or more lipophobic plant nutrients; and

(c) not in excess of about 50% of a mixture of one or more cationic emulsifiers selected from the group consisting of cationic emulsifiers, emulsifiers which exhibit cationic characteristics in acidic conditions and mixtures thereof;

wherein the cationic emulsifier acts as a coupling agent between the lipophilic solvent and the lipophobic plant nutrient to form a homogeneous liquid composition.